

An Essay

on Scarlatina.

Respectfully submitted  
to the Faculty of the

Homoeopathic Medical College  
of Pennsylvania.

On the First of February 1859.

For the Degree of  
Doctor of Medicine.

by  
Louis P. Ehrman,  
of  
Kentucky.

## Scarlatina.

This is a contagious eruptive fever characterized by inflammation of the fauces and a peculiar scarlet eruption of the skin, making its appearance generally on the second day of the disease, and ending in desquamation of the cuticle from the sixth to the eighth day. Scarlatina in its simple form is not as a general rule attended with much danger, but runs its course mildly and terminates in convalescence in five or six days. In the graver forms however inflammations and congestions frequently supervene soon after the first attack; sloughing, gangrene, and disorganization of the throat and larynx will almost always set in, if not properly treated. In the fall and winter of the year Scarlet fever is much more frequent than in the summer months, it attacks children more fre-



quently than older persons, but none are positively excluded from this disease. The premonitory symptoms, (which are however not always present) are pains in the limbs and back, languor, and weariness, the febrile stage is ushered in, by a frequent pulse, furred tongue, anorexia, great nausea and vomiting hot dry skin with flushed face, and muscular weakness are frequent symptoms: delirium, coma, stupor and other disorders of the nervous system develop themselves in the commencement of this affection: the pulse is generally more frequent in this fever than in any other disease of like nature. It frequently rises to 120 or 130 beats in a minute and sometimes even higher. Inflammation<sup>m</sup> or irritation of the fauces is a<sup>m</sup> universal symptom which generally appears in the commencement, they are of a red color, and not unfrequently swollen. this

color is not ~~only~~ confined to the fauces alone but diffuses itself over the interior of the mouth, the tongue is red, at the tip and edges, and coated on its upper surface with a yellowish white fur.

The eruption first presents itself in little red spots, of a confluent nature, first upon the face, neck, and breast, and then on the trunk and extremities. It disappears on pressure and is of a deeper color in the flexures of the joints.

The color resembles a boiled lobster shell. Heat is one of the prominent symptoms, and as indicated by the thermometer, the temperature is often  $105^{\circ}$  or  $106^{\circ}$  of Fahrenheit. Constipation is a general symptom: diarrhoea may occur in the advanced stages. Thus the disease runs on to the sixth or eighth day when all these symptoms begin to decline in favorable cases. Desquamation



follows rapidly, the cuticle is thrown off in little scales, where the skin is thick, as in the palm of the hands, and soles of the feet, it may come away in large pieces or molds. Albumen is nearly always detected in the urine, and not unfrequently epithelium from the uriniferous tubules or other parts of the urinary canal are thrown off. I will now try and describe Scarlatina in its different forms.

This disease is divided into three forms, namely:  
*Scarlatina Simplex*, *S. Anginosa*, *S. Maligna* or *Cynanche Maligna*.

### *Scarlatina Simplex.*

This is the least dangerous of all the varieties, and we may say totally devoid of bad consequences, if the patient is not exposed to any cause that can aggravate the symptoms.

We have general debility, shiverings, followed by

flushes of heat, nausea, frequent pulse, thirst loss of appetite, and headache are the principal precursory symptoms. On the second day the eruption appears, in patches generally, or diffusing themselves uniformly over the skin. On the appearance of this eruption many of the above named symptoms may disappear, and in the course of about five days, the interstices between the patches will be more distinct, the fever will partially abate, and come to a favourable termination unless there is a malignant tendency, intercurrent inflammation<sup>m</sup> or dangerous sequela.

### Scarlatina Anginosa

This form of Scarlatina is of a graver type, and is not as manageable as the one just mentioned, it is ushered in with the usual symptoms of the preceding form, but more aggravated, the eruption does not appear quite as early as in the Simple form,



coming usually on the third day. It is less copious and less diffused. sometimes confining itself to one limb, or scattered in patches over the trunk, with healthy skin in the intervening parts. Or it may come out in successive crops succeeding each other, at longer or shorter intervals. The affection of the fauces is also more prominent, and advances with the progress of the disease. Deglutition is difficult and painful, and not unfrequently when liquids are swallowed they return through the nostrils. Upon examination the fauces, tonsils, uvula and soft palate are found to be very much swollen, patches of a <sup>te</sup>concreat exudation are often seen at an early period, covering the surface of the fauces, they are soft and can be scraped off, underneath the skin presents the usual livid red appearance, common to the mouth in this affection, these membranous exudations may extend even further

down the throat, there odor is very offensive and the patient from swallowing this putrefied matter, will not unfrequently have profuse diarrhoea, the discharges from the bowels are sometimes very acid, so as to excoriate the anus. The <sup>eyes</sup> are red and irritated, and not unfrequently watery as in measles, Hemorrhage from the nose also occurs. In the more advanced stages an acid and excoriating liquid runs from the nose. From the spreading of the inflammation the interior of the nose may become the seat of the disease, upon which hard crusts form, sufficiently obstructing the nasal passages as to prevent breathing through them, the patient then lies with open mouth which in time becomes very dry and annoying, and not unfrequently the lips crack and throw off the epithelium, the respiratory passages may become so much swollen as to impede respiration. In connection with the



internal disease, there is usually swelling of the external parts. The parotids, sub-maxillarys, and lymphatic glands become the seat of inflammation but it is generally confined to the latter. The inflammation may also traverse back through the Eustachian tube in the cavity of the tympanum. The fever and inflammation of the throat, in this form often continues after desquamation has commenced, and recovery is sometimes considerably postponed, when there is much suppuration in the glands of the neck or any secondary affection, which may occur will add to the danger.

### *Scarlatina Maligna.*

This form is the most dangerous of all the types, and proves almost universally fatal. The patient may be so overpowered, in the beginning, by the poison as to prove fatal almost instantaneously.

The pulse is slender, feeble, frequent, and irregular,

great anxiety of mind, oppression, and comatose symptoms are also present, respiration is slow, the skin cold or hot in some places, and cold in others, the face pale and livid. Partial reaction may take place. But resistance soon ceases, and the patient dies on the second or third day.

Where there is greater strength of the system or the disease less violent, the early symptoms are those of the anginous variety, on the appearance of violent initial pain in the loins and extremities, later appearance of the eruption, and disposition to delirium and stupor, we may suspect that the malignant form will speedily develop itself. As the disease advances it assumes a decidedly typhus character. The pulse becomes feeble, the eruption disappears, the throat is of a deep red, the pseudo-membranous exudation, in the fauces is of a dirty or dark hue, eschars, and ulcerations often



form in the throat which are of a gangrenous character, the tongue is brown, the breath fetid, dark sordes on the teeth. blood issuing from the fissures in the lips, eschars form upon the sacrum and hips, then a collapse of the system takes place, involuntary discharges, fluttering pulse, and death takes place in seven or ten days; notwithstanding all these untoward symptoms the patient will in some rare cases get well.

Diagnosis. — Scarlatina. before the eruption, may be mistaken for many other febrile diseases, whose initial stages are similar to each other, but after the appearance of the eruption, the only disease with which it is liable to be confounded is measles. But from this it can be distinguished, by the eruption appearing on the second day where in measles it appears on the fourth; also by the absence of the catarrhal symptoms, and the rash being of a

more bright red colour in Scarlatina. There is also a peculiar odor emitted in this disease which is similar to that given off from the cages of wild beasts. It may be confounded with Roseola. These two diseases may be distinguished by its not being accompanied with sore throat, the fever is also much less, in the latter, and the eruption of a brighter colour, and more regular.

Prognosis.— In no complaint, is the result more uncertain than in this: therefore to make a guarded prognosis is always prudent. The mildest cases which we might think free from danger, may assume a malignant character, while on the contrary cases apparently dangerous will sometimes end favourably. If Scarlatina is prevalent, we may perhaps sometimes by the mildness or severity of the disease in general, rely on, to give a decided prognosis. Some individuals or fam-



ilies have a peculiar predisposition to this disease, and in such it is always more unfavorable than in others. In females during pregnancy the attack is also more severe. Late appearance, deficiency, or sudden retrocession of the eruption are unfavorable symptoms, also a livid hue of the fauces, with gangrenous, extension of the false membranous exudation in the larynx, <sup>hemorrhage</sup>, continued delirium, involuntary discharges, and great prostration.

*Anatomical characters.*— Sometimes no anatomical lesion can be found by a post mortem investigation, but generally the skin is red and injected. The kidneys frequently congested or inflamed, and sometimes the aggregated or isolated glands of the intestines are found enlarged and softened.

*Cause.*— The cause of Scarlatina is specific and by most considered contagious. Many persons catch this disease very readily, while others may be

exposed to the contagion, and at the same time be insusceptible to it. Scarlatina not unfrequently occurs epidemically, sometimes confining itself to a small district, town or city, at other times involving a larger community, it also occurs sporadically. The cause has not always the same morbid influence, in different epidemics, as some are of a milder character than others. The disease generally occurs but once in the same individual, except in some rare instances, a person may be subject to a second attack. Age is no absolute protection against this disease, but children are more liable to its influence than adults. The period of inoculation is from five to ten days.

*Sequelae.* — Few diseases leave such a long train of evils behind them as Scarlatina. The most formidable of which is dropsy, this generally develops itself during the desquamative stage. It occurs in the forms



of hydrothorax, ascites, hydropericardium and sometimes hydrocephalus, but mostly in the form of anasarca. It generally follows when there is albumen in the urine during the desquamative stage. Abscesses in the parotid and submaxillary glands, are among the most troublesome sequelae, which often exhaust the patient to such a degree as to prove fatal, or if not fatal greatly to protract convalescence. Abscesses may also open in the ear and thus produce an habitual discharge of pus, and also the eustachian tube may be closed, either by union of ulcerations, or by inflammatory thickening of its coats and obstinate ozena, is not unfrequently produced by Scarlatina. Abscesses in the testes, inflammation of the vagina in females, pleuritis, and peritonitis may also be the result of this disease.

Prophylactics.— The institution of suitable means for the mitigation, or the entire prevention

of a disease, is by far the most important, although the most neglected branch of medical science, which comes under the supervision of the physician.

Belladonna has been used with the greatest success as a prophylactic against Scarlatina, and I believe it has been the practice of Homoeopathic physicians, to distribute the high dilutions of Belladonna among the families where they are called to prescribe for a case of scarlatina, especially if the disease is likely to become prevalent.

Treatment.— I now come to the treatment of Scarlatina commencing with naming the remedies which have been used against the various forms of the disease generally.

The principal remedies are; Bell, Acon, Mure vivus, Specae, Rhus tox, Arsen, and Muriat acid, also Nitr acid.

Belladonna is indicated by a bright scarlet red, smooth skin, commencing about the stomach, extending



over the whole trunk, neck, face, and extremities, in succession disappearing and quickly returning from pressure; heat redness and bloatedness of the face, burning thirst, furious delirium, dry burning heat, great agitation, with constant tossing, inquietude and continual tossing from side to side. Vertigo with anguish and falling with loss of consciousness, strong pulsation of the temporal arteries, darting pains, with opisthotonos, eyes red from congestion of the vessels of the conjunctiva, sparkling and convulsed or fixed, glistening and prominent. Dry hard tongue, or if convulsions supervene, accumulation of mucus in the mouth, fauces, and throat, with inflammation and swelling of the tonsils and uvula, suppuration of the tonsils with inability to swallow liquids, sensation of choking with spasmodic constriction of the throat. Pressure and cramp like constrictive pains in the stomach and

epigastrium principally after eating.

Aconite, either alone, or in alternation with Belladonna when the skin is covered with a miliary eruption, or in patches of a bluish color; or the skin is hot, dry, and imparts a stinging sensation to the hand, when it is laid on the surface; extreme thirst and restlessness, with hard and frequent pulse; vertigo when erect, weight and fulness in the forehead, with outward pressure, and beatings of the arteries; eyes red, inflamed, and suffused with tears, with pupils dilated. Face hot and red, lips dry and cracked, dryness of the mouth with burning of <sup>the</sup> tongue; burning and pinching in the throat when swallowing; a constant desire to cough, which is of a hoarse and croaking character. Short, difficult and anxious breathing, with sensation of anguish and palpitation. Ipecacuanha will be found very useful if there should be much nausea with occasional vomiting, gastric un-



easiness, hurried and oppressed respiration, pale or  
 sallow countenance, great languor, debility, dislike  
 and repugnancy <sup>anorexia</sup> to food; dry spasmodic cough,  
 with a feeling of spasmodic constriction of the larynx,  
 alvine evacuations of a dysenteric character or some-  
 times frothy, with chills and shiverings. There is a pe-  
 culiar dry brown state of the tongue, and lips, which are  
 cracked, bleeding, and scaly; nostrils excoriated, and  
 presenting a similar aspect.

*Rhus Toxicodendron* is recommended when there is  
 much burning and itching, and the cutaneous eruption  
 presents the nettle rash appearance, when the fever  
 borders upon the typhoid type, and is of an intermi-  
 tent character, with <sup>violent</sup> thirst.

*Mercurius vivus*, when *Belladonna* and *Rhus* have  
 been insufficient, and there is the appearance of ul-  
 ceration about the mouth and throat, with increased  
 secretion of mucus accompanied with swelling of the

throat and tonsils.

Arsenicum is highly indicated if there is absolute exhaustion of strength, sudden emaciation, nocturnal paroxysms of fever with burning heat, burning face distorted features, cold hands, ~~impartial~~ thirst, bad temper painful restlessness, and sleeplessness at night, and gnashing of teeth; gangrene of the throat and ulceration of excessively foetid matter.

Muriatic acid, is an important remedy in malignant Scarlet fever, if there is dark red flushings of the cheeks, lividity of the neck, and dull redness of the eyes, irregular and faint efflorescence which changes to a dark red colour, often intermixed with petechial ulcerations of the tonsils and adjoining parts with slough; foetid breath, acrid discharges from the nose, with soreness, chaps, and blisters, about the nose and lips.

Nitric acid is essential in the malignant form of Scarlatina, if it should assume the typhoid



type, and it may be given after Muriatic acid.

*Administration and Dose.*— The medicine may be administered every one, two, three, or four hours according to the severity of the case, but as soon as considerable improvement takes place, the intervals may be lengthened.

In reference to the proper dose, it is sufficient to say, that the experience of a majority of practitioners, are in favour of the lower potencies; but many may have been perhaps equally ~~the~~ successful with the higher, it must therefore be left to the discrimination of the Physician to choose what attenuation he thinks best.

*Diet.*— From the very commencement of Scarlatina, up to the period of convalescence, the patient generally loathes all kinds of solid or animal food, and therefore no particular direction is necessary to restrain the patient from eating, except from spices, and heating,

stimulating condiments, and all articles of diet or luxury which possess drug or medicinal properties. On the contrary, you will often find it most difficult to suggest such nice preparations of food as will be most likely to invite the patient's appetite. For a suitable quantity or quality of nourishment, so as to supply the rapid waste, and impart, and maintain healthy reaction, is as important as it is to be careful not <sup>to</sup> overload the stomach <sup>with</sup> indigestible or badly chosen articles of diet. The patient will generally call for nothing but cold water, and there being no objection to this as a drink, it may be freely allowed; but if this is allowed in too great quantities there will be no opportunity to introduce nourishment, and the patient's strength must rapidly sink. The preparations to satisfy thirst should contain nourishment in the most concentrated form, consistent with a fluid state. Such as rice-water, barley-water, tapioca, sago, arrow-root, beef-tea, and among those



which have a solid form, the animal jellies must be selected according to the peculiarities of the case, and the choice of the patient. As convalescence approaches, soft toast, sea-biscuit softened in water, and other forms of prepared crackers, may be gradually introduced.

In no case, should a rigid system of restriction to light but nourishing food be departed from, during convalescence, and indeed for some weeks after the patient presents the appearance of established health. Exercise in the open air, when it is clear and dry, but not to the extent of fatigue, frequent washing with tepid or cold water, and rubbing dry with a flesh-brush or rough towel, will be an important auxiliary during convalescence, as well as during the treatment of the acute stage.